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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,263	05/29/2001	Mark J. Pivac	01-307L	5396
719	7590	06/18/2004	EXAMINER	
CATERPILLAR INC. 100 N.E. ADAMS STREET PATENT DEPT. PEORIA, IL 616296490			DRAPER, DEANN L	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/885,263

Applicant(s)

PIVAC, MARK J.

Examiner

Deanna L. Draper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 14-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Acknowledgements***

The Request for Continued Examination filed by the Applicant on March 22, 2004 is acknowledged. The Amendment after final filed on February 3, 2004 has been entered. Claims 1 – 10 and 14 – 19 are pending.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skotnikov et al. (US 6,311,795), and further in view of Lee et al. (US 6,131,919). Skotnikov discloses a work vehicle for traversing terrain with a chassis (100 in Fig. 1), at least one ground engaging member (108 in Fig. 1), at least one elongate member having a first end rotatably coupled with the chassis (123b in Fig. 1) and a second end coupled to the ground engaging member (130 in Fig. 1), a controller (see Fig. 6), a position sensor generating a position signal indicative of an orientation of said elongate member to the chassis and relaying the position signal to the controller to change the chassis vertical height (156 in Fig. 1; Col. 4, lines 10 – 12 and 26 – 31). Skotnikov also discloses a hydraulic motor coupled to said second end for imparting motion to the ground engaging member (115 in Fig. 1). However, Skotnikov does not disclose a controller for calculating an average slope of the terrain. Lee discloses a method of automatically adjusting a body of a tractor to a horizontal position and apparatus for performing

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the same, including a controller (40), which receives a signal from a slope detecting sensor (38 in Fig. 1) which calculates an inclined angle of the tractor body based on the slope of the land that the vehicle is traveling along in order to adjust the body of the tractor to a horizontal position to prevent crops from being damaged. Therefore it would have been obvious to an ordinary person skilled in the art at the time the invention was made to modify Skotnikov by including a controller which calculates an inclined angle of the tractor body based on the slope of the land that the vehicle is traveling along in order to adjust the body of the tractor to a horizontal position to prevent crops from being damaged as taught by Lee.

Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skotnikov modified by Lee, as applied to claims 1 and 14 above, and further in view of Pischke et al. (US 5,142,897). Skotnikov modified by Lee discloses the invention as claimed above, however the sensor is not a potentiometer. Pischke discloses a height measuring sensor that is a simple potentiometer (Col. 2, line 27) in order to measure a deviation in body height due to a change in load. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the position sensor in Skotnikov modified by Lee a potentiometer in order to effectively measure a deviation in body height due to a change in load, as taught by Pischke.

Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skotnikov modified by Lee as applied to claims 1 and 14 above, and further in view of Ahonen (US 4,099,733). Skotnikov modified by Lee discloses the invention as claimed in Claim 1 and also states that the work vehicle in question can be a construction vehicle, tractor, or other

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agricultural vehicle, etc. (Col. 2, lines 49 – 52), however does not disclose a vehicle with a cab portion and first trailer portion hingedly coupled to the cab portion. Ahonen discloses a vehicle including a cab portion (5 in Fig. 1) with a first trailer portion hingedly coupled to and articulable relative to the cab portion (2 in Fig. 1) in order to carry a load or heavy machinery. Therefore, it would have been obvious to further modify Skotnikov and Lee by making the agricultural vehicle one having a cab portion with a first trailer portion hingedly coupled to the cab portion in order to carry a load or heavy machinery, as taught by Ahonen.

Claims 6, 7, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skotnikov modified by Lee, and further in view of Rumminger (US 4,557,497). Skotnikov modified by Lee discloses the invention as claimed above, however does not disclose a cab and second trailer portion coupled to and articulable relative to the first trailer portion. Rumminger discloses a tandem trailer with a cab (10 in Fig. 1) and second trailer (14 in Fig. 1) coupled to and articulable relative to a first trailer portion (12 in Fig. 1) in order to obtain the load carrying ability of a large trailer without unduly limiting the unit's maneuvering capability. Therefore it would have been obvious to further modify Skotnikov modified by Lee by adding a cab and second trailer portion coupled to and articulable relative to the first trailer portion in order to obtain the load carrying ability of a large trailer without unduly limiting the unit's maneuvering capability, as taught by Rumminger.

Claims 8 – 10, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skotnikov modified by Lee, and further in view of Martin et al. (US 5,709,394). Skotnikov

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discloses the invention as claimed above, including a provision for using more than 4 wheels (Col. 3, lines 11 – 13; Col. 8, lines 61 – 63), however does not disclose a pendulum acting as a gravity operated roll sensor. Martin discloses a suspension means for a utility vehicle including a sensor (91), which may be a pendulum (Col. 9, line 21) in order to sense transverse inclination of the frame and level the vehicle. Therefore it would have been obvious to further modify Skotnikov modified by Lee by using a pendulum as a gravity operated roll sensor in order to sense transverse inclination of the frame in order to level the vehicle transversely, as taught by Martin.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 – 10 and 14 – 19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Paggi et al. (US 6,273,203) discloses an agricultural machine with a self-leveling cab.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deanna L. Draper whose telephone number is 703-306-5939.

The examiner can normally be reached on Monday - Friday, 9:00 - 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dld

*DD*  
DEANNA DRAPER  
PATENT EXAMINER

*Paul N. Dickson* 4/14/04  
PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600